



A new species of flightless *Hadromeropsis* from the Colombian páramo (Coleoptera: Curculionidae; Entiminae; Tanymecini)

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During a visit to the New Zealand Arthropod Collection in Auckland, New Zealand, in February 2007 I examined a series of specimens of a large flightless species of Entiminae from high elevation in the páramo of Colombia. To my surprise, they proved to represent an undescribed species of Tanymecini. This species is here described as *Hadromeropsis annae* Anderson, in recognition of the 80th birthday (19 July 2007) of Anne T. Howden, of Ottawa, Canada. The genus *Hadromeropsis* was last revised by Anne Howden in 1982. Description of this species in her honor is a fitting testament to her excellent work on Tanymecini.

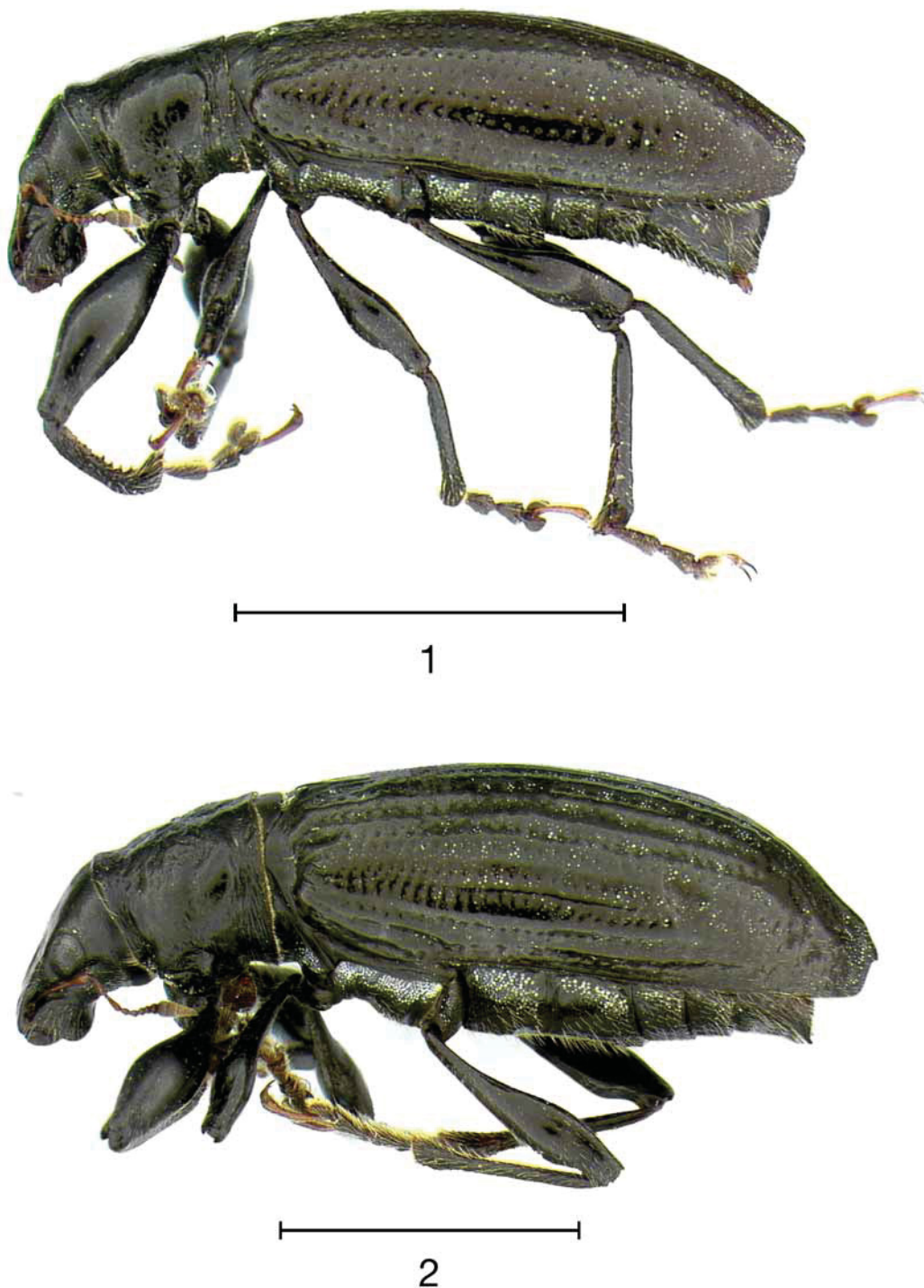
Hadromeropsis annae Anderson, new species

(Figs. 1–8)

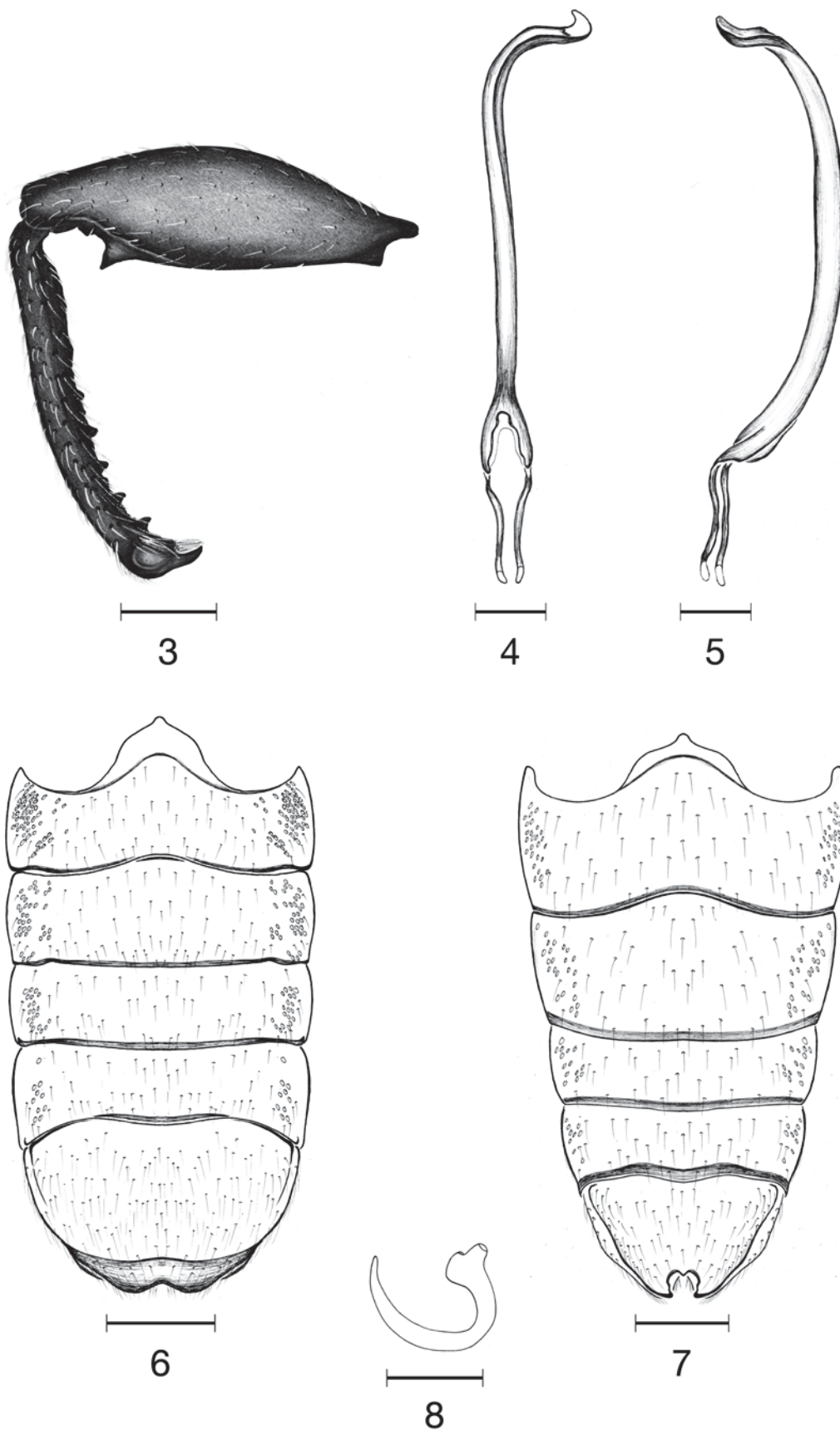
Diagnosis. Body (Figs. 1–2) black, shining; sparsely covered with small pale blue, green or gold scales. Fore femur (Fig. 3) with inner margin with subapical acuminate tooth. Brachypterous, humeri rounded in male, slightly more projected in female; elytra elongate and slender, striae represented by linearly arranged punctures, not impressed; elytra with ventral surface at apex without raised carina but rather with oblique line extended from sutural apex to lateral margin at apical 1/5 of elytral length, demarcating inner microsculptured area and outer glabrous, shiny area. Aedeagus (Figs. 4–5) extremely long and slender, markedly asymmetrical, curved dextrally at almost 90 degree angle at about apical 1/3 of length, then redirected sinistrally at extreme apex; no internal sac or internal structures evident; aedeagal struts extremely short.

Description. Body length: male 9.8–11.4 mm, female 11.1–13.7 mm; width: male 2.5–2.8 mm, female 2.9–3.7 mm. Body (Figs. 1–2) color black, except antennae and tarsi reddish brown; with minute pale blue, green or gold, round scales widely, very sparsely scattered over elytra, denser along lateral portions of mesepimeron, metasternum and ventrites 1–3. Side of head below eye with small patch of small, fine white-blue scales of various sizes and shapes. Head and rostrum glabrous, shining; frons flat, broadly, shallowly foveate at middle just anterior to eyes; epistomal ridge low, rounded, not distinctly raised. Scrobe distant from eye. Mandible with long dorsolateral seta and two or three long lateral setae. Antennal scape in resting position reaching posterior margin of eye; funicle with article 1 subequal in length to article 2. Eye separated from anterior margin of pronotum by about 2/3 its own diameter. Pronotum approximately as wide as long, sides in dorsal view almost straight, constricted apically and basally. Disk with surface slightly uneven, not punctate; irregularly shallowly impressed along midline, shallowly creased laterally at midlength and irregularly creased over surface. Postocular vibrissae very weak. Elytra across humeri only slightly wider than across base of pronotum. Elytra elongate and slender, about 3x longer than width across humeri, slightly more than 3x longer than pronotum; sides very slightly divergent, widest just behind middle, then convergent to apex; apex truncate, sutural interval produced into a tooth in female, not so in male. Striae and intervals regular, straight; striae punctures shallow, indistinct, intervals flat; declivity unmarked; no elytral tubercles or setae. Disk of elytra with very fine transverse crenulations. Edges of elytra smooth, with scattered, moderately long, wispy setae in apical 1/3 and across truncate apex. Ventral surface of elytra with oblique line extended from sutural apex to lateral margin at apical 1/5 of length, demarcating inner microsculptured area and outer glabrous, shiny area; line not carinate, except slightly so towards lateral margin of elytra. Brachypterous; wings about one-half length of elytra in female, about one-fifth in male; humeri rounded in male, slightly more projected in female. Fore femur (Fig. 3) distinctly enlarged, wider than middle or hind femur, smooth basally, becoming longitudinally striate distally, without punctures; inner edge smooth, with moderately large, subapical acuminate tooth. Middle and hind femora lacking tooth, inner edge smooth. Fore tibia (Fig. 3) straight medially, curved distally, less so proxi-

mally; inner edge with small irregularly arranged teeth of various sizes; outer edge longitudinally shallowly crenulate; middle tibia on inner edge with very small, indistinct teeth, hind femora with inner edge smooth. Abdomen (Figs. 6–7) with ventrites elongate, 1 and 2 slightly longer than 3 and 4, 5 slightly longer than 3 and 4 combined; all with moderately dense, suberect, moderately long, setae directed posteriad; all ventrites impunctate. Ventrite 5 slightly longer than wide, setae slightly denser at apical margin at middle, apex truncate to very slightly broadly emarginate in male; deeply, narrowly excised in female, middle of excision with small, rounded tooth. Male with aedeagus (Figs. 4–5) extremely long and slender, asymmetrically curved dextrally at almost 90 degree angle at approximately apical 1/3 of length, extreme apex redirected sinistrally; no internal sac or internal structures evident; aedeagal apodemes very short, approximately 1/6 total length of aedeagus; tegminal strut slightly more than twice length of aedeagal apodeme. Female with spermatheca (Fig. 8) slender in form, nodulus and ramus proximal, cornu elongate slender, strongly curved.



FIGURES 1–2. *Hadromeropsis annae* Anderson, **sp. n.**, lateral habitus. 1, male; 2, female. Scale bar = 5.0 mm.



FIGURES 3–8. *Hadromeropsis annae* Anderson, **sp. n.**, 3, front femur and tibia; 4, aedeagus, dorsal view; 5, aedeagus, lateral view; 6, abdomen, male, ventral view; 7, abdomen, female, ventral view; 8, spermatheca. Scale bars = 1.0 mm except 0.25 mm for Fig. 8.

Material examined. Holotype male, labeled “Colombia / Páramo, 3700m / Sumapaz / 4 Oct 1978 / H. Sturm”, “on *Espeletia* / at night”, “81” (NZAC). Paratypes (2 males, 5 females): 2 males, 1 female with same data; 2 females with same data except “2 October 1978, at dusk on *Espeletia*”; 1 female with same data except “3600–4000m / 3 Oct 1978”, “H. Sturm / in dead leaves / *Espeletia*”, “59”; 1 female with same data as previous except “3700–3900 m” (in CMNC, NZAC).

Distribution. Only known from Colombia, Páramo de Sumapaz (03°45'N 74°25'W ; SE of Villarica, 25 km S Bogota; coordinates and locality information from Luteyn (1999)).

Biology. Specimens were collected at elevations ranging from 3700–4000 m in páramo habitat at dusk or at night in dead or on living leaves of *Espeletia* (Asteraceae).

Remarks. This species is here placed as a brachypterous species of *Hadromeropsis* (subgenus *Hadrorestes*), but it represents extremes in the structure of the male genitalia that are unlike those in any other *Hadromeropsis*. Similarly, the presence of an acuminate tooth near the inner apex of the fore femur is unique in the genus. These features might warrant distinct generic status, but the similarity in all other characters to typical *Hadromeropsis* species suggests that this is a highly derived, flightless species congeneric with other species of *Hadromeropsis*. It is especially noteworthy that *H. annae* possesses a non-carinate, oblique line on the ventral surface of the elytra near the apex, which in other species of *Hadromeropsis* is evident as a raised carina in the same orientation. This carina is similarly weakly developed in the subgenus *Hadrorestes*, especially the *H. alacer* group, as well as in other brachypterous species in the genus. Howden (1982) described three new brachypterous species of *Hadromeropsis* (subgenus *Hadrorestes*) in her revision; *H. striatus* from Colombia, *H. exilis* from Bolivia and *H. brachypterus* from an unknown locality. As with *H. annae*, the unique holotype of *H. striatus* was collected at high elevation (3760m) in Colombia by H. Sturm, but in dead leaves of *Libanothamnus*. Howden (1982: 127) commented that *H. striatus* possesses some unique character states and expresses extremes of some of the generic features; nevertheless she tentatively placed it in *Hadromeropsis* because it shared more characters with that genus than with any other.

Acknowledgements

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